

Fig. 1

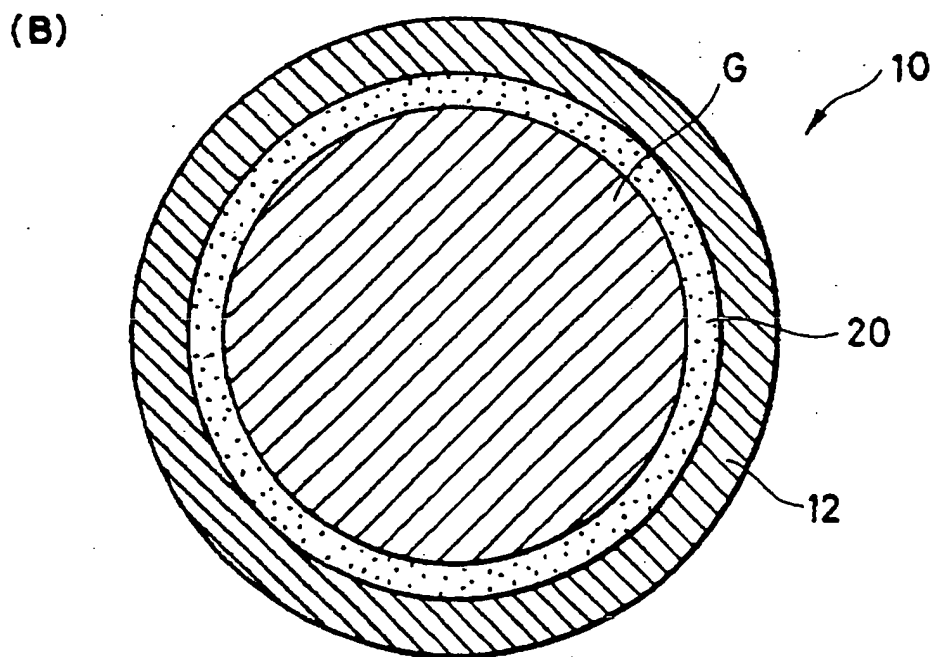
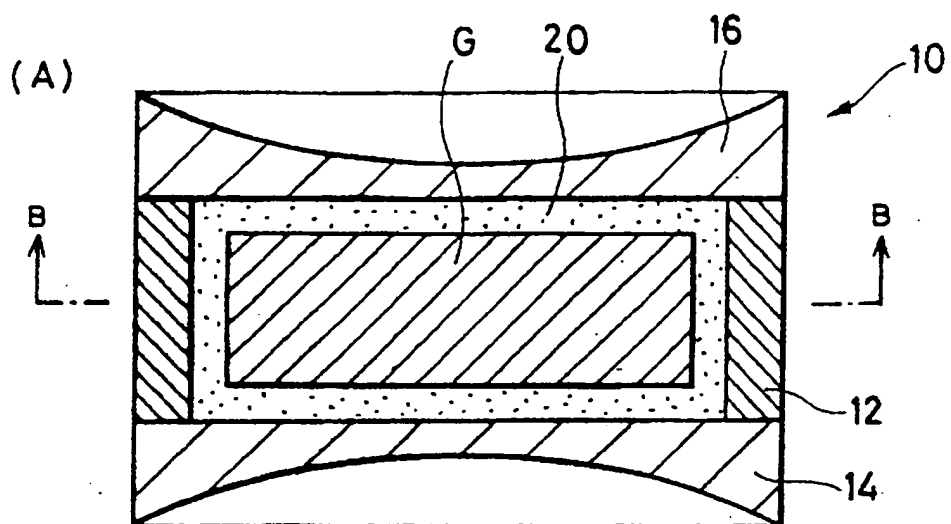


Fig. 2

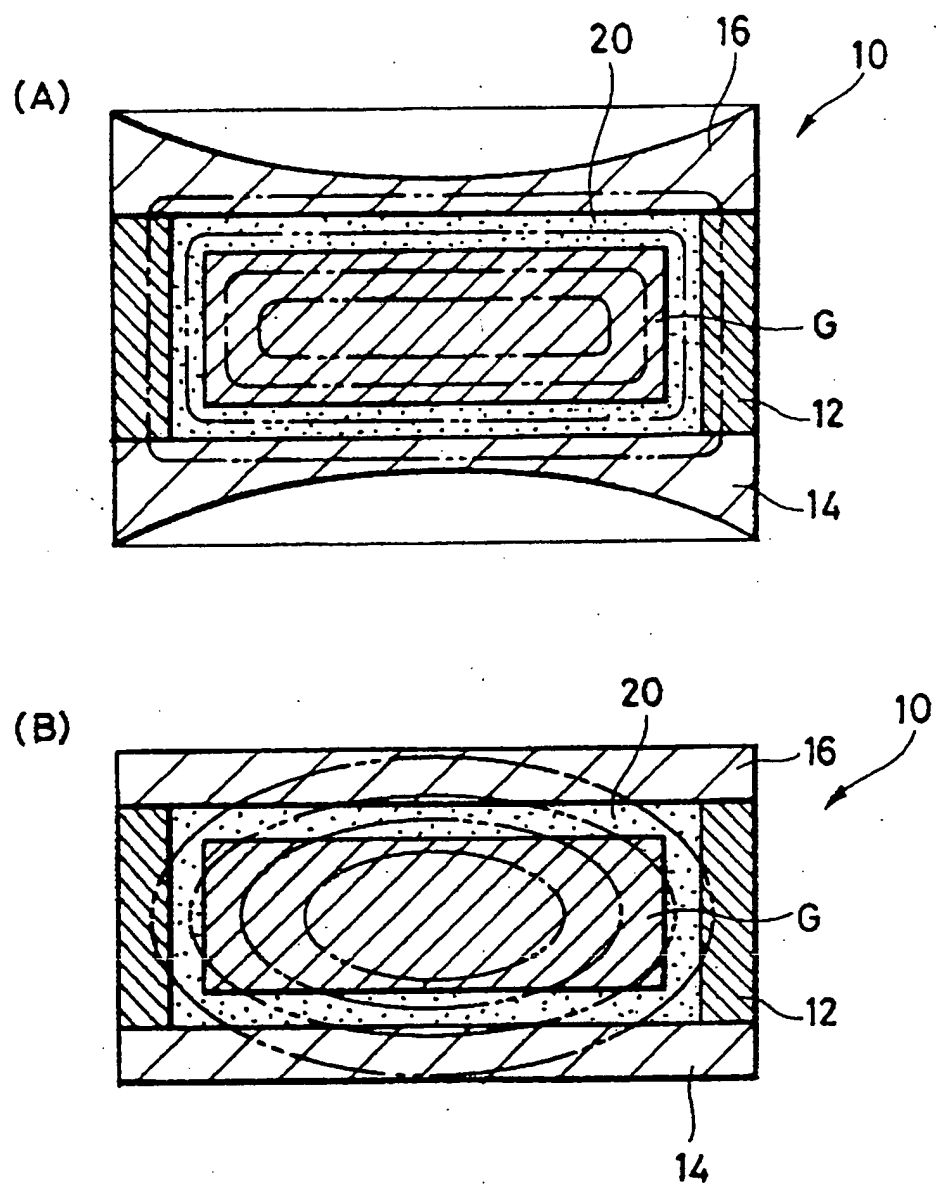
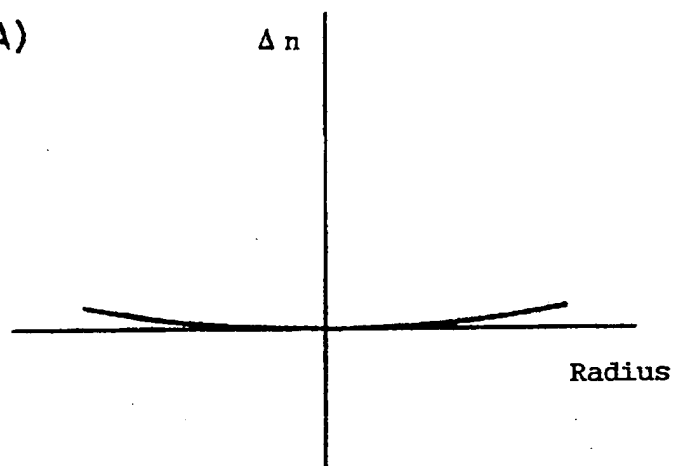


Fig. 3

(A)



(B)

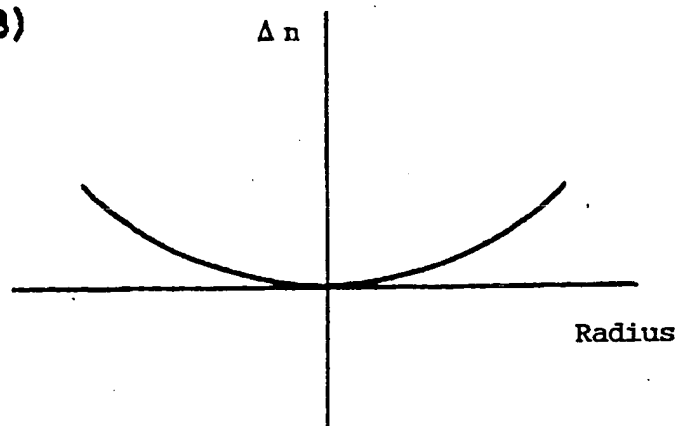


Fig. 4

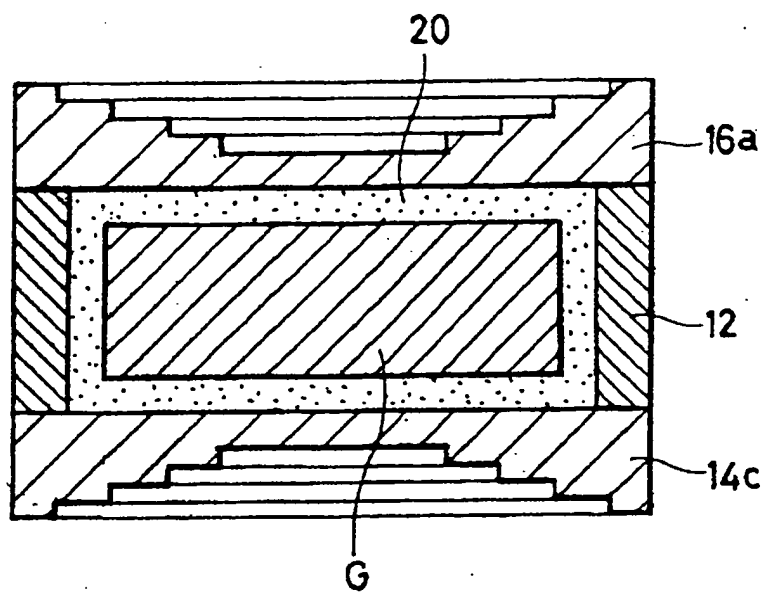


Fig. 5

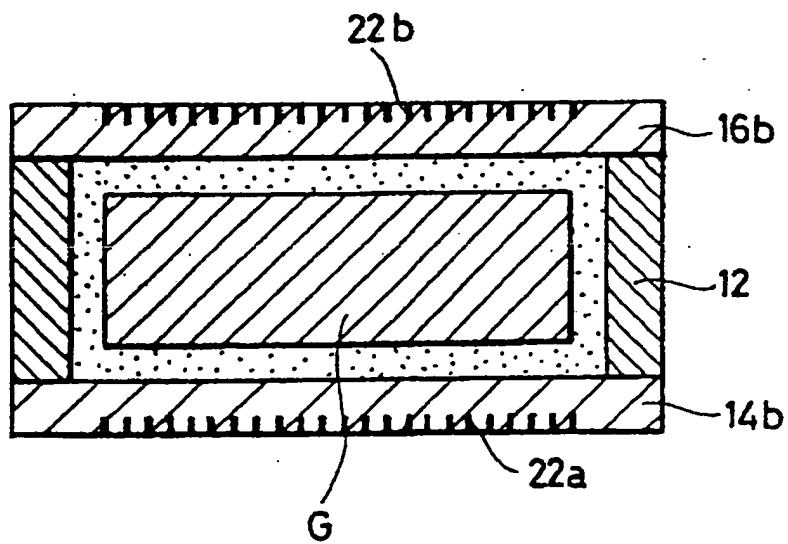


Fig. 6

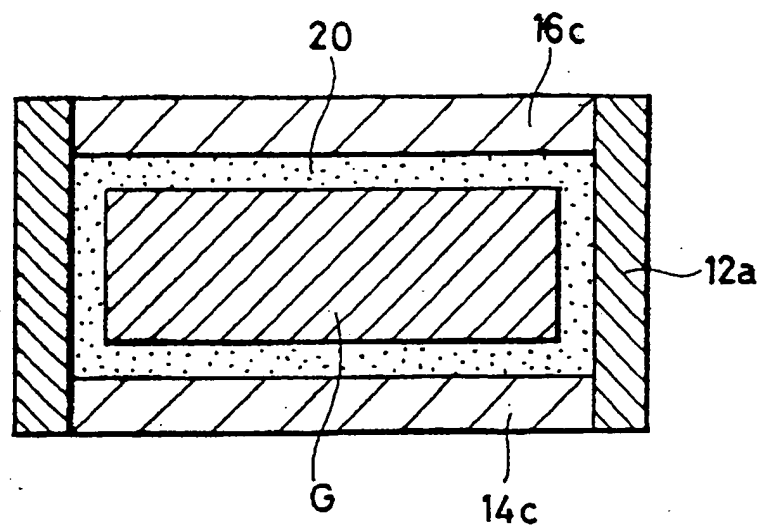


Fig. 7

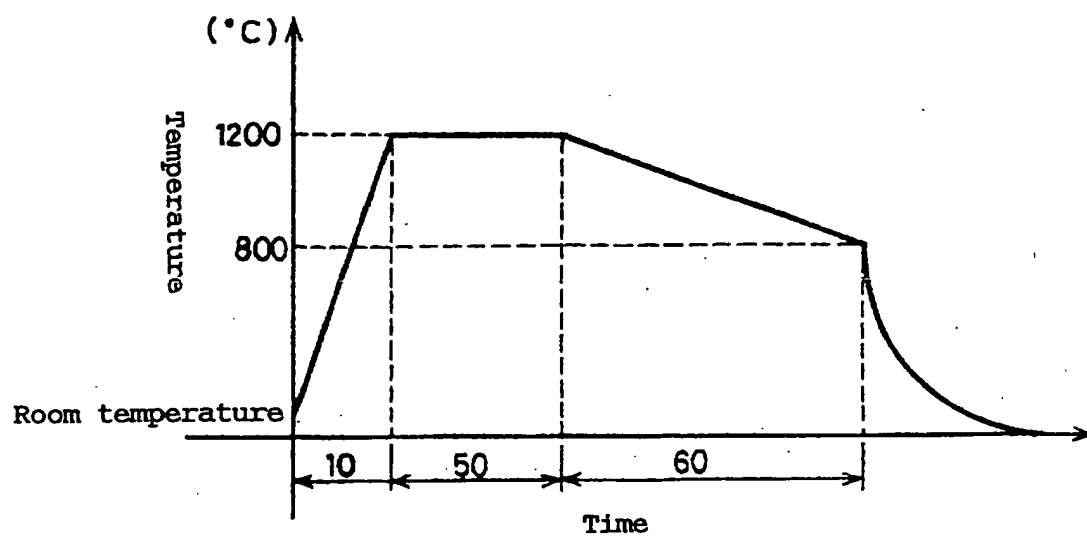


Fig. 8

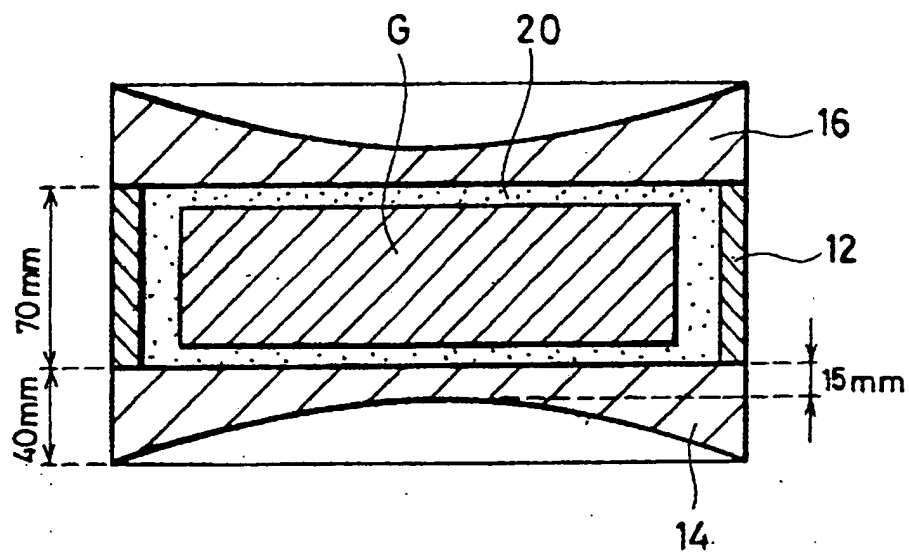


Fig. 9

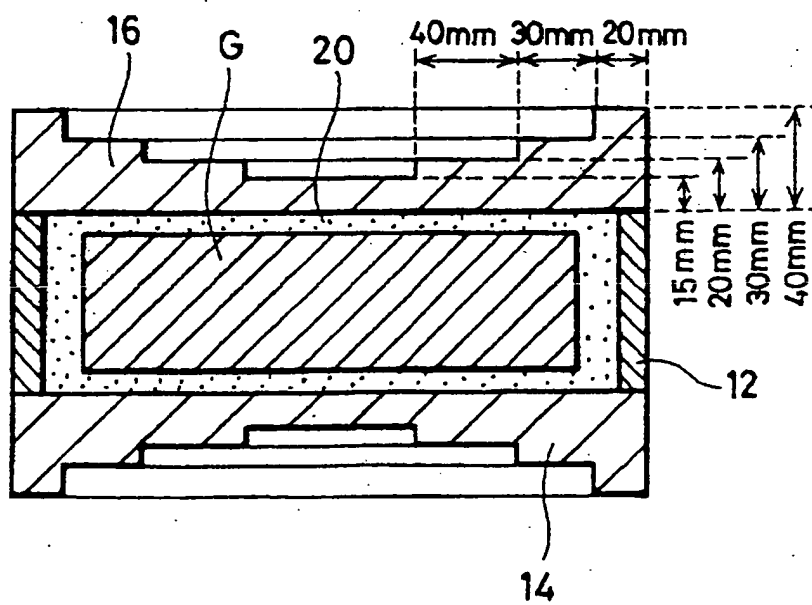


Fig. 10

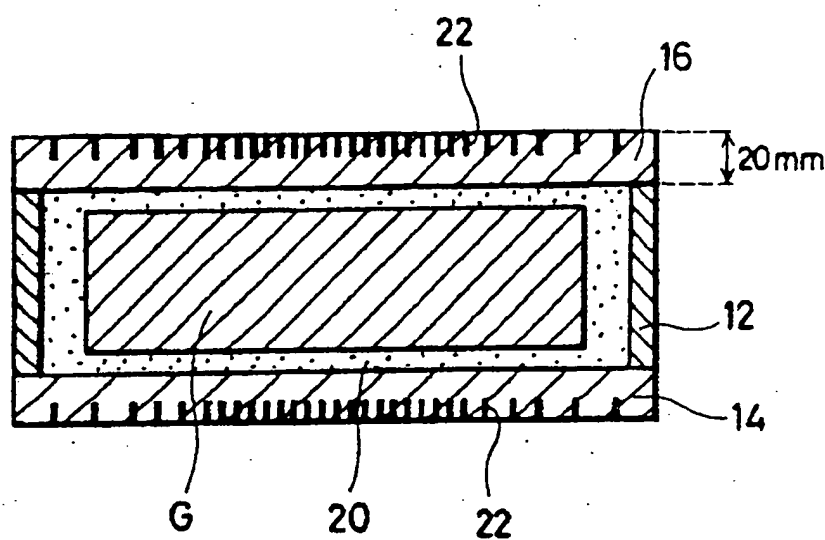


Fig. 11

	Δn before treatment ($\times 10^{-6}$)	Δn after treatment ($\times 10^{-6}$)	Birefringence (nm/cm)	Initial transmittance	Hydrogen concentration ($\times 10^{17}$)	Impurity, Na
Example 1	4.9	0.6	0.33	99.8 %	5.2	2 ppb or lower
Example 2	7.8	0.9	0.43	99.8 %	5.1	2 ppb or lower
Example 3	5.5	0.9	0.45	99.8 %	5.2	2 ppb or lower
Comparative Example 1	5.7	1.7	1.4	99.8 %	5.3	2 ppb or lower
Comparative Example 2	6.2	2.5	1.5	99.8 %	5.0	2 ppb or lower

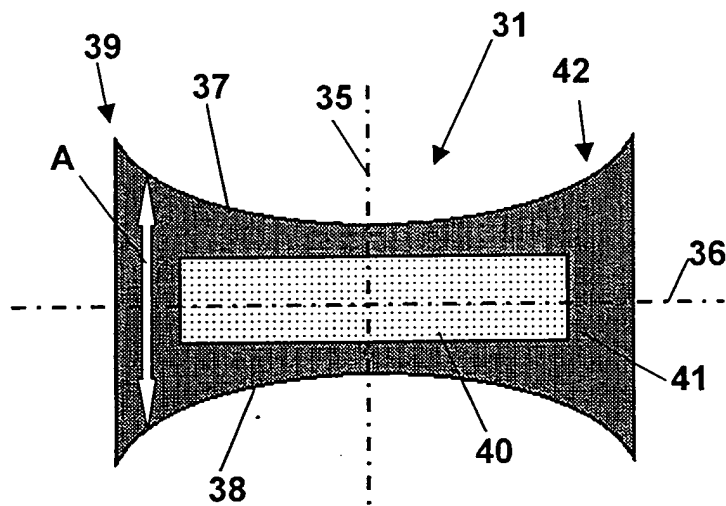


Fig. 12

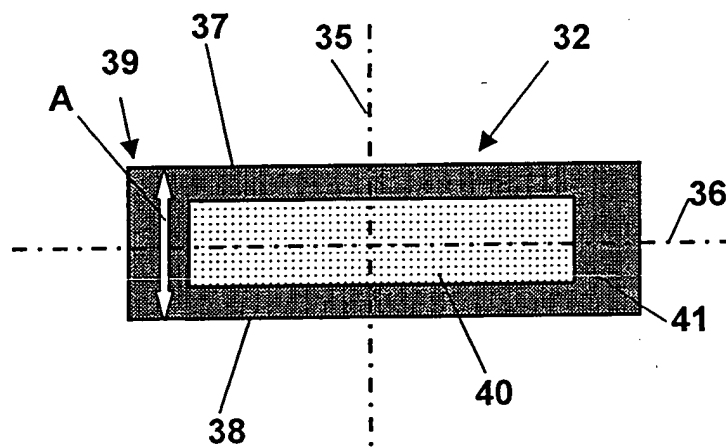


Fig. 13 (prior art)

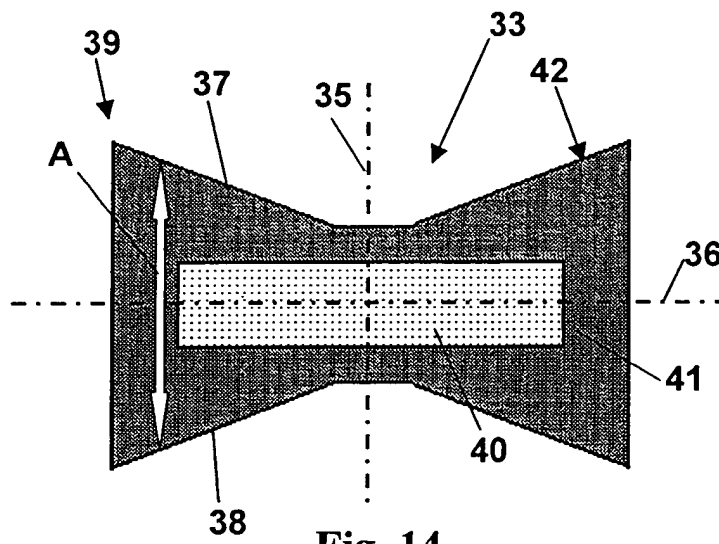


Fig. 14

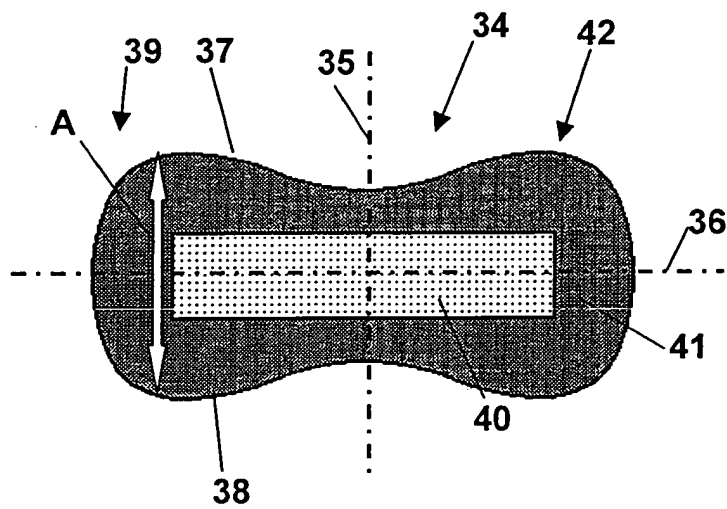


Fig. 15